



Department of Pesticide Regulation



Paul Gosselin
Acting Director

MEMORANDUM

Arnold Schwarzenegger
Governor

TO: Alan C. Lloyd, Chair
Air Resources Board

FROM: Paul H. Gosselin
Acting Director
(916) 445-4330

DATE: August 30, 2004

SUBJECT: PROPOSED TOXIC AIR CONTAMINANT MONITORING FOR 2005

Pursuant to Food and Agricultural Code section 14022(c), the Department of Pesticide Regulation (DPR) requests that the Air Resources Board (ARB) monitor for the following pesticides in 2005:

- Acrolein
- 1,3-Dichloropropene
- Methyl bromide
- Sulfuryl fluoride

We are requesting application-site monitoring for acrolein because it has moderate pesticidal use and high volatility. In addition, both ARB and the Office of Environmental Health Hazard Assessment (OEHHHA) have an interest in the nonpesticidal exposures to acrolein. This monitoring will help give all agencies a more complete picture of the overall risk. Based on discussions with ARB's Monitoring and Laboratory Division staff, monitoring should be limited to preliminary sampling to estimate the range of concentrations and determine the suitability of current methodology or the need to develop new methodology. If an acceptable method can be developed and preliminary monitoring data warrant, ARB would conduct a full study in 2006.

We are requesting ambient monitoring for 1,3-dichloropropene because use patterns have changed significantly since the last monitoring, and the last monitoring was not conducted in areas of the highest use. We are also requesting limited application-site monitoring for 1,3-dichloropropene. DPR plans to conduct application-site monitoring for 1,3-dichloropropene using charcoal tubes. Previous monitoring indicates that air concentrations measured with charcoal tubes may differ from those measured with canisters. We would like ARB staff to analyze canister samples collected side-by-side with DPR's charcoal tubes to better estimate the difference between the methods.

Since methyl bromide can be determined simultaneously, we would like ARB staff to include it during the ambient 1,3-dichloropropene monitoring. However, no monitoring targeted specifically for methyl bromide is necessary.



Alan C. Lloyd
August 30, 2004
Page 2

We are requesting monitoring for sulfuryl fluoride because DPR may soon register this pesticide as a postharvest commodity fumigant. This use is significantly different from the structural fumigations ARB has monitored in the past. In addition, the registrant may change the method of application for structural fumigations and conduct air monitoring. Since the methodology for this pesticide is complicated and method performance can vary, DPR may need ARB to conduct quality control checks for the registrant monitoring and/or monitor commodity fumigations.

DPR will recommend the number, location, and time of the monitoring after evaluating the 2003 pesticide use reports. It is likely DPR will recommend monitoring one or two applications each for acrolein and sulfuryl fluoride, as well as ambient monitoring for 1,3-dichloropropene and methyl bromide.

Based on a preliminary assessment of the toxicology data, DPR requests the following target quantitation limits:

Acrolein	0.7 $\mu\text{g}/\text{m}^3$
1,3-Dichloropropene	0.5 $\mu\text{g}/\text{m}^3$
Methyl bromide	0.1 $\mu\text{g}/\text{m}^3$
Sulfuryl fluoride	30.0 $\mu\text{g}/\text{m}^3$

Thank you for your consideration of this request. If you have any questions, please contact me, or John Sanders, of my staff, at (916) 324-4100.

cc: Joan Denton, Ph.D., OEHHA Director
John Sanders

Alan C. Lloyd
August 30, 2004
Page 3

bcc: Jim Behrmann, ARB Executive Office
Lynn Baker, ARB Stationary Source Division
Bill Loscutoff, ARB Division Chief
Jeff Cook, ARB Chief
Michael Poore, ARB Chief
Ken Stroud, ARB Chief
Webster Tasat, ARB Monitoring and Lab Division
Kevin Mongar, ARB Monitoring and Lab Division
George Alexeeff, OEHHA Deputy Director
Melanie Marty, OEHHA Supervising Toxicologist
Anna Fan, OEHHA Supervising Toxicologist
Tobi Jones, DPR Assistant Director
Doug Okumura, DPR Assistant Director
Gary Patterson, DPR Medical Toxicology Branch Chief
Chuck Andrews, DPR Worker Health and Safety Branch Chief
Randy Segawa, DPR Senior Environmental Research Scientist
Shifang Fan, DPR Associate Environmental Research Scientist (1807 files)
Pam Wofford Surname File



Terry Tamminen
Agency Secretary

Air Resources Board

Alan C. Lloyd, Ph.D.
Chairman

1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov,



Arnold Schwarzenegger
Governor

TO: Paul H. Gosselin
Acting Director
Department of Pesticide Regulation

FROM: Catherine Witherspoon
Executive Officer
Air Resources Board

DATE: September 15, 2004

SUBJECT: TOXIC AIR CONTAMINANT MONITORING FOR 2005

Your October 30, 2004 memorandum on proposed monitoring for toxic air contaminants under Food and Agriculture Code 14022(c), requested that ARB conduct monitoring for the following compounds in 2005: acrolein, 1,3-dichloropropene, methyl bromide, and sulfuryl fluoride.

General information on the selection process for the above listed compounds, on the types of monitoring (i.e., structural fumigation, commodity chamber fumigation, agricultural application, or ambient), and on the target quantitation limits are included in the memo and have been reviewed by ARB staff. The sampling and analytical methods for 1,3-dichloropropene, methyl bromide and sulfuryl fluoride were used for monitoring conducted previously for the DPR. Sampling and analytical methodology for acrolein will be evaluated during preliminary monitoring conducted in 2005. We understand that if an acceptable method can be developed, and preliminary data warrant, a full study would be conducted in 2006.

Per your memorandum, DPR will recommend the number, location and time of the monitoring after evaluating the 2003 pesticide use reports. It is likely that DPR will recommend monitoring one to two applications each for acrolein and sulfuryl fluoride, as well as ambient monitoring for 1,3-dichloropropene and methyl bromide. No breakdown products will be monitored.

In 2005 we will work with DPR staff and make every effort to complete the requested monitoring for acrolein, 1,3-dichloropropene, methyl bromide, and sulfuryl fluoride. If you or your staff have any questions or concerns please contact William V. Loscuttoff at (916) 445-3742 or via e-mail at wloscutto@arb.ca.gov.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: <http://www.arb.ca.gov>.

California Environmental Protection Agency

Paul H. Gosselin
September 15
Page 2

cc: Joan Denton, Ph.D.
Director
Office of Environmental Health Hazard Assessment

Alan Lloyd, Ph.D.
Chairman
Air Resources Board

Tom Cackette
Chief Deputy Executive Officer
Air Resources Board

Paul H. Gosselin
September 15
Page 3

bcc: George Alexeeff, Ph.D., OEHHA
Melanie Marty, Ph.D., OEHHA
Anna Fan, Ph.D., OEHHA
Sharon Lee, Ph.D., DHS
Tobi Jones, Ph.D., DPR
Doug Okumura, DPR
John Sanders, Ph.D., DPR
Gary Patterson, Ph.D., DPR
Charles Andrews, DPR
✓ Randy Segawa, DPR
Shifang Fan, Ph.D., DPR
Pam Wofford, DPR
Jim Behrmann, EO
Peter Venturini, SSD
William Loscutoff, MLD
Jeff Cook, MLD
Kenneth Stroud, MLD
Michael Poore, MLD
Janette Brooks, SSD
Jim Aguila, SSD
Webster Tasat, MLD
Russell Grace, MLD
Pete Ouchida, MLD
Kevin Mongar, MLD
Lynn Baker, SSD